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to the contrast the edge made with the sky in the one case, and the gradually brightening towards the middle in the other.

There is a great deal yet to be settled as to the extent and number of the nebulae in this cluster, and the remarkable difference in the direction given of the principal line of the large nebula is quite incomprehensible.

Rotation Period of Jupiter. By T. D. Brewin, Esq.

In observing Jupiter for the first time last Opposition, August 7th, 1879, 11^h 30^m G.M.T., I saw a very conspicuous red spot in the southern hemisphere; the preceding end of red spot at the time was as near central as I could judge by eye-estimation. I made a drawing of the planet, thinking it would be a favourable opportunity to obtain the rotation period from sketches taken when the preceding end was central, and at as great an interval of time between successive sketches as possible.

The last sketch of the spot when the preceding end was central I obtained February 4th, 1880, 5^h 30^m G.M.T., a period of 180 days 18 hours from the first drawing, equal to 437 rotations, the result obtained being 9^h 55^m 34^s.1, a result so near to Mr. Pratt's described in the January *Notices* of the R.A.S. that I thought it would be of interest to send an account as confirmatory of Mr. H. Pratt's.

14, *St. Nicholas, Leicester,*
1880, *April 9.*

Observations of the Great Southern Comet, 1880, made at the Melbourne Observatory. By R. L. J. Ellery, Esq., Director of the Observatory.

The Comet whose appearance I announced by the last mail was observed here from the 9th till the 17th instant. After its first apparition it became rapidly fainter, while the tail increased in length up to 45°; by the 12th, however, the tail had almost disappeared, and on the 17th—the date of our last observations—the nucleus could only be observed with considerable difficulty in a dark field. The moonlight and the Comet's rapid diminution in brightness have now put it out of reach of further measures. A table of apparent places deduced from our observations is annexed.

Observatory, Melbourne,
1880, *February 20.*

Apparent Places of Comet, 1880, from Observations at the Melbourne Observatory.

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Melbourne Mean Time.				Comet			Observer	Instrument.	No. of Measures.	Comet—Star			Name of Star.	Remarks.		
d	h	m	s	h	m	s				a	m	s			'	''
Feb. 9	9	9	30.5	23	41	6.73		N	3	+4	1.90	—	1	8.4	Wash. 10462	
9	9	31	44.6	23	41	22.22	W	N	3	—4	18.57	—	3	24.0	Wash. 10520	
10	8	40	28.7	23	57	55.76	W & E	N	3	—2	11.30	+15	59.3		Wash. 10648	
10	9	18	42.6	23	58	22.96	W	S	3	—1	44.10	+15	50.4		Wash. 10648	
14	9	44	46.0				W	N	3	+1	33.67	—	8	2.0	7½ Mag.	{ about 1° 0' 23" RA 122 29 20 NPD } comp.*
14	9	59	26.7	1	2	5.62	W	N	1	+5	22.55	+9	10.5	σ Sculptoris		
15	8	46	4.2	1	15	22.38	W	N	6	—2	34.51	+11	59.9	BAC 421		
16	8	27	17.3	1	28	23.92	E	S	3	+2	13.06	+11	34.4	Wash. 719	Comet excessively faint	
16	9	43	23.7	1	29	5.35	W	N	7	+2	54.49	+9	22.0	Wash. 719	"	
17	8	57	29.8	1	41	9.51	W	N	6	—1	7.74	+1	16.9	Lacaille 522	{ Comet barely visible; measures little better than guesswork.	
17	9	42	2.7	1	41	31.32	E	S	7	—0	45.93	—	0	0.4		Lacaille 522

In the observer's column E refers to Mr. Ellery, the director, and W to Mr. White, the chief assistant.
In the instrument column S refers to the South Equatoreal of 8 inches' aperture, and N to the North Equatoreal of 4½ inches' aperture.
The observations were made with a rhombus micrometer.